

sequence **82**, for example, when the bonus round is triggered during game play, the pre-rendered 3D game sequence **82** is retrieved from the storage device **62** and caused to be displayed on the secondary display **27**. In one embodiment, the game sequences **80**, **82**, **84** are organized like chapters or bookmarks on a DVD, each chapter or bookmark representing a particular outcome or bonus game. In the event that the game sequence is not animated, the digital video recorder **60** may be instructed to output the same game sequence repeatedly until instructed otherwise.

[0046] Although **FIGS. 4 and 5** have been explained with reference to a digital video recorder **60**, it should be understood that aspects of the present invention can be implemented in other ways. For example, instead of pre-rendering images of a mechanical device, the mechanical device may be 3D-rendered in real time using a 3D graphics processor or the like, implementing a physics engine that realistically renders mechanical devices within a simulation world corresponding to a game, such as described in co-pending U.S. patent application Ser. No. 10/657,650, filed Sep. 8, 2003, titled "Gaming Machine Performing Real-Time 3D Rendering Of Gaming Events," previously incorporated by reference herein in its entirety. In one embodiment disclosed therein, a stator of a roulette game is modeled in 3D to simulate computationally the behavior of a ball launched onto the stator until the ball comes to rest in one of the pockets at the periphery of the stator.

[0047] One or more sequences of pre-rendered images of mechanical devices in accordance with the present invention may be stored on the server **50** and downloaded to the gaming terminal **10** via the communications interface **68** or other suitable interface in embodiments lacking the digital video recorder **60**. Because the mechanical devices are now realized as software, they can be replaced or updated easily without having to take the gaming terminal **10** offline or otherwise remove it from service for an extended period of time. The new or updated images are loaded onto the server **50** which transmits them to the gaming terminal **10** and optionally stores them on the server **50**. New gaming software may also be updated on the server **50** or gaming terminal **10** to present the new images as additional selections to the player. Thus, instead of being presented with 3 bonus games from which to play, the player may be presented with 4 bonus games, the fourth perhaps representing a new bonus game that the player has not previously experienced.

[0048] **FIG. 6** illustrates an exemplary 3D game sequence displayed on the secondary display **27**. The game sequence may be pre-rendered or rendered in real time. The secondary display **27** displays a swinging pendulum **86** and rotating gears **88**, which cooperate together like a pendulum clock would in the physical world. The pendulum **86** and gears **88** are mechanical devices that may be modeled using a physics engine to simulate their behavior in the physical world. About the secondary display **27** are structural elements **90**, **92**, which add depth or dimensionality to the mechanical devices **86**, **88** displayed on the secondary display **27**. Thus, the 3D-rendered images of a mechanical device on the secondary display **27** together with the physical structural elements disposed about the secondary display **27** create an overall impression of three-dimensionality such that the player would have difficulty discerning physical structural elements from simulated ones. The impression can be fur-

ther cemented by morphing the mechanical devices or otherwise causing them to behave contrary to the way they would behave in the physical world. Preferably, the secondary display **27** is a flat plasma display, achieving a crisp, bright picture viewable from many angles, but other displays such as LCD displays, lenticular 3D displays, true 3D, and persistence-of-vision displays are contemplated. The 3D-rendered mechanical devices are preferably rendered to resemble, as much as possible, physical hardware, such as traditionally implemented on conventional gaming machines. Additional examples of mechanical devices within the contemplation of the present invention include a stator, rotating wheels, flipping tiles, mechanical die, and mechanical reels, to name a few.

[0049] In a specific embodiment, the mechanical devices such as the 3D-rendered pendulum **86** and gear **88** images are involved in at least partially depicting the game outcome. In other words, the mechanical device or devices displayed on the secondary display **27** according to the present invention are not superfluous game elements ("bells and whistles," so to speak), but rather are integral to the depiction of the game outcome. In other embodiments, the mechanical device is a mechanical bonus indicator that indicates a bonus or a potential bonus to the player via a mechanical device.

[0050] **FIGS. 7 and 8** are block diagrams of methods of displaying a pre-rendered 3D-rendered mechanical device and a real-time 3D-rendered mechanical device, respectively, according to embodiments of the present invention. Referring to **FIG. 7**, a pre-rendered image (or animation) representing a 3D-rendered mechanical device is stored (**100**). The 3D-rendering may be carried out using any conventionally known technique, such as by using a physics engine and a 3D graphics processor to simulate the mechanical device's behavior in the physical world. The image (or animation) may be stored in a server remote from the gaming terminal or in the gaming terminal. The image or animation may be a raw or compressed image (such as TIFF or JPEG) or video format (such as Motion JPEG, MPEG, or QuickTime®) or in an analog video format, such as one suitable for display according to the PAL or NTSC standards. As noted above, the animation (or image sequence) may employ one or more special effects on the 3D-rendered mechanical device such as morphing, fading, disappearing and reappearing, and so forth.

[0051] A wagering game on the gaming terminal is initiated (**102**), and the wagering game is displayed on a primary display of the gaming terminal (**104**) to the player. A game outcome for the wagering game is determined (**106**) by a controller residing in the gaming terminal or remote from it such as in a server. The pre-rendered image is retrieved (**108**) and is associated with the game outcome (**110**) in either order. Thus, the pre-rendered image depicts at least a portion of the game outcome and is displayed on a secondary display of the gaming terminal (**112**). As described above, in other embodiments, the pre-rendered image depicts a bonus from a bonus game displayed on the secondary display.

[0052] The player may also be presented with a selection of multiple games, each having a different bonus game. Depending on the selection, a pre-rendered image(s) or animation associated with the selected bonus game is identified so that it can be displayed as part of the bonus game selected by the player.